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KNOWLEDGE

VOL 2 MAY 2008

OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

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OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

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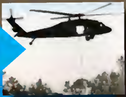

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DON'T W

SUMMER

Summertime is not the time to give safety a vacation.

The time between the Memorial Day and the Labor Day weekends marks the period when our Army's troopers, their Families and our Civilian teammates are traditionally exposed to the year's greatest risk from accidental mishaps and fatalities. These 101 Critical Days of Summer are when more of us are traveling, participating in water sports and enjoying the numerous outdoor activities and thus, increasing our exposure to potential off-duty tragedies.

Our Army's strides in decreasing on-duty accidents, through proactive Leader engagement and the continual use of safety tools and awareness programs, reflect tremendous efforts. Your actions, working to protect our Soldiers while on duty, must now transfer to impact our off-duty accidents during these upcoming summer months.

We believe the Army's success in decreasing on-duty accidents is the direct result of the continuous oversight and leadership our Soldiers receive. But commander and supervisor leadership cannot physically be present 24/7. Therein lies the challenge – how do we modify the lifestyles of our Soldiers to raise awareness and adjust actions, in a positive manner, to achieve our desired results of decreased injuries and deaths? We believe there are other tools and paths you might pursue to achieve positive goals – those tools are Soldiers' peers and Families.

The Army has always recognized the influence and support Families have in the lives of Soldiers.

> “Insist your **BUDDY WEARS** a **SEAT BELT**, purchases the motorcycle that **MATCHES** their **RIDING SKILLS** and understands **INDISCIPLINE** is a **KILLER.**”

ANT NO TIME BLUES!

Families serve as the key foundation of our value sets which factor greatly into our decision-making process. That said, it only makes sense to devote the appropriate amount to time and energy to educate Families in safety awareness and practices, thereby empowering them so they can then educate our Army force. Tools such as the Family Engagement Kit, located on the USACRC Web site, are developed specifically for this and can stretch to the extended Family.

So enjoy your summer, but also take these best practices and recommendations to heart – you are too important not to.

- **Check to see if your installation has a Motorcycle Mentorship Program.** These MMPs not only provide great group ride opportunities, but also allow newer riders to hook up with more experienced riders to learn skills and techniques. Our force continues to mirror society in the continuous growth of new riders each year. We welcome our new riders, now let's mentor them.
- **Remain committed to using the Travel Risk Planning System before traveling.** Inspect your vehicle and plan your travel with plenty of stops to ensure you remain attentive while driving. Fatigued driving is a common contributor to vehicle accidents.
- **Alcohol and water activities never mix.** Alcohol affects judgment, motor skills, peripheral vision, depth perception, night vision and balance – all essential skills while enjoying water activities. Enjoy the summer months in the sun but drink responsibly.
- **Never leave a fallen comrade.** A comrade can fall to different types of enemies. If you see a comrade in trouble, step in and engage. Insist your buddy wears a seat belt, purchases the motorcycle that matches their riding skills and understands indiscipline is a killer.

I challenge you to make the right decisions in your off-duty activities during these 101 Critical Days of Summer and never give safety a day off. «

Army Safe is Army Strong!!

William H. Forrester
Brigadier General, USA
Commanding

WHAT ARE YOU DOING ABOUT IT?

> "How many **LOSSES** do **YOU** have to read about or how many **CLOSE-CALLS** do **YOU** have to witness before **YOU STEP UP** and do something to **PREVENT** these **NEEDLESS DEATHS?**"

The 101 Critical Days of Summer are almost upon us and I want to share some insights and accident trend analysis, for awareness, that may help make this a more enjoyable and safer season. To date, off-duty accidents represent nearly 75 percent of all Army accidents we have suffered so far this year. If our five-year accident trend remains consistent, we can expect to endure the loss of over 200 Soldiers before the end of this fiscal year! The loss of just one Soldier deprives us of a friend or peer, however, many others also endure pain because this Soldier was someone's father, mother, sister, brother, son or daughter. I promise you, not a day goes by when I and those here at the safety center are not trying to think of a way to prevent accidental losses. So my question to you - What are YOU doing about it? How many losses do you have to read about or how many close-calls do you have to witness before you step up and do something to prevent these needless deaths? There are three areas responsible for more than two-thirds of all off-duty Army accidents; privately-owned vehicles (POVs), drowning and fatigue.

POV accidents with contributing factors such as speed coupled with loss of control, account for a large percentage of all Army accidents. Did you know that something as trivial as one-quarter of an inch could possibly save your life? One-quarter of an inch roughly equates to 15 to 20 mph in the average American car; however, one-quarter of an inch can be 40 to 50 mph on a motorcycle, depending on the gear you are in. Say you just purchased a vehicle. Beware - recent studies indicate moving from a sedan to SUV or crusier to sportbike can increase your likelihood of an accident. Experience doesn't always transfer; cruisers versus sportbikes are as different as sedans versus sport utility vehicles (SUVs). You may find you can easily overdrive the capabilities of the machine, or rather, the machine possesses capabilities exceeding your experience level.

The Army experienced 15 drowning accidents last fiscal year. Unfortunately, that total is more than the two previous years combined. While several different factors played a part in these losses, one factor is present in all but two of these accidents - another person's presence. From the time we're old enough to enter the water, most of us are taught not to eat before you swim and never go into the water by yourself. While it is not clear if either of these adages could have made a difference in many of these accidents, it is clear that in some maybe they could have. The second common factor present, in more than 50 percent of these accidents was the proximity of land. Fact - standing on or in close proximity to land may lead to overconfidence or a false sense of security around water. Even the best swimmer may lose their life when thrust into a situation where currents and hypothermia are present, even with a personal floatation device.

Fatigue is present more often than alcohol in off-duty accidents. Often overlooked and even less understood, over the course of the last 10 years, fatigue played a factor in claiming an average of 75 lives a year.

As Soldiers and professionals, we often push ourselves by burning the candle at both ends, especially during those few precious opportunities when we can get away and relax. Rest cycles are often METT-T driven when operating in a deployed environment. In addition to Leaders, Soldiers are responsible for the amount of rest they get while not deployed.

These are demanding times for our Army; but a little planning and forethought will hopefully lead you and your formation through a safe and enjoyable 101 Critical Days of Summer. «

Army Safe is Army Strong!

Tod Glidewell

Tod L. Glidewell
Command Sergeant Major
U.S. Army Combat Readiness/Safety Center

Taking the Plunge

RICHARD SCOTT
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

For lovers of the great outdoors, a day on the water can provide the perfect escape from the stresses of everyday life. As we head into the summer season, many Soldiers are drawn to some form of water, whether it's a swimming pool, river, pond, lake or ocean. Yet, for all the fun and relaxation water-related activities offer, they can also pose a deadly risk to those who fail to incorporate the proper safety measures.

Over the last 10 years, the Army has experienced 95 water-related accidents involving one or more Soldier fatalities; and these statistics do not include Family members or civilian friends. Because Mother Nature is constantly changing, we must be prepared to meet her whims. Unfortunately, we don't often get a second chance.

During fiscal 2007, there were 14 Army water-related accidents, resulting in 15 deaths. In seven of these cases, the Soldier had not planned to enter the water but went overboard from a fishing boat or similar watercraft.

That was the case for two Soldiers who encountered dangerous weather conditions while fishing on a lake in January 2007. The Soldiers had tied their 12-foot flat-bottomed boat to a bridge. The boat was not well equipped and only had a small trolling motor. As a storm blew in, the conditions on the lake became windy. The water temperature was below 50°F and, because it was a cold, winter day, the Soldiers were wearing heavy clothing. At some point, the Soldiers entered the water; their bodies were found three days later. Neither Soldier had worn a personal flotation device (PFD).

> "SMALL-BOAT ACCIDEN
> the MOST FREQUENT ca
> DROWNING FATALITIE

Small-boat accidents are the most frequent cause of drowning fatalities nationwide. Of the fiscal 2007 accidents, only one Soldier was reported to have worn a PFD. The other drownings involved scuba activities and

DID YOU KNOW?

- Wearing several layers of clothing will insulate and keep you warm in cold weather.
- Clothing layers trap air between them, offering great insulation. Outer layers are easy to remove if temperatures warm up during the day.
- When fishing in waders, always wear a wader belt to ensure better in-stream safety. It serves to keep water out of the waist and boot area in case you happen to step into water deeper than the wader.
- Properly inflated float tubes will keep you higher out of the water, causing less drag on the float and making it faster and easier to paddle around. Ensure you follow the manufacturer's recommended guidelines for using float tubes.
- A personal flotation device, when worn under clothing, provides extra warmth and emergency flotation if you go for an unexpected plunge.

TS are
use of
S nationwide.”

swimming in lakes, rivers and open water.

Many times, the victim doesn’t intend to enter the water but either dives or falls in. Such was the case when two Soldiers on combat patrol in Afghanistan fell into a river while wearing a full combat load. One Soldier was able to swim out of the river, but rescue attempts for the other Soldier were unsuccessful.

No matter where we are or who we’re with—both at work and play—we need to be prepared to take the plunge. Before taking part in water-related activities, assess the readiness of everyone with you, especially children. In addition to being able to swim, completion of a water survival training program is highly recommended.

When preparing for watercraft activities, a little prior planning can also go a long way. Keep these tips in mind before heading out on the water:

- Dress for the water temperature, not the air; wearing light layers will keep you warmer and dryer.
- Wear a hat; 50 percent of an individual’s body heat is lost through the head.
- Before activities, eat high-energy foods and bring along a high-energy bar.
- Bring extra clothing in a water-resistant bag in case someone gets wet.
- Ensure the watercraft is equipped with the appropriate number and type of PFDs and they are worn correctly.
- Most importantly, let someone know where you are going and when you plan to return.

Soldiers are exposed to enough risks while on duty. So why be careless and bring unnecessary risk into off-duty activities that are supposed to be fun? By taking the time to properly prepare for water-related activities, you can help ensure the only thing to worry about is having a good time.«

»FYI

- In 2005, the U.S. Coast Guard received reports for 4,969 boating incidents; 697 participants were reported killed and 3,451 were injured.
- The percentage of drownings attributed to boating mishaps declined from 82 percent in 1990 to 70 percent (491 out of 697) in 2005. The remaining boating fatalities were due to trauma, hypothermia, carbon monoxide poisoning or other causes.
- It is estimated 426 lives could have been saved in 2005 if all boaters had worn personal flotation devices.
- Alcohol was a contributing factor in about one-quarter of all reported boating deaths.
- Open motor boats were involved in 45 percent of all reported incidents and personal watercraft (PWC) were involved in another 26 percent. (Open motor boats are made of open construction and specifically built for operating with a motor, including boats canopied or fitted with temporary partial shelters.)
- In 2005, the number of reported non-fatal injuries (1,007) involving PWC such as Jet Skis® and WaveRunners® increased for the first time since 1996. PWC-related fatalities (65) also increased in 2005.

Source: U.S. Coast Guard, Department of Homeland Security
http://www.uscgboating.org/statistics/Boating_Statistics_2005.pdf

TO KILL A F

COMPILED BY THE KNOWLEDGE STAFF
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

Racing is as American as mom and apple pie, which is why every year millions of people watch high-powered cars battle it out in National Hot Rod Association races. While there is always the risk of an accident during these races, the crowd is normally not in danger. However, the same cannot be said for street racing. It was just after midnight on a Sunday morning when four Soldiers got into a conversation much like the one below. They could not have imagined what it would lead to. (Editor's note: The Soldiers' real names have been changed to protect their identies. The comments below attributed to "Bill" were created solely for the purpose of this article.)

"OK, Anna, it doesn't matter that my car has a four-cylinder engine and yours is a six-cylinder—I'm a better driver and I'll win the race," Bill said. He went on to taunt her, "If you're scared, just say so! Better yet, just let Tod race your car. It doesn't matter to me. I'm a better driver than any of you punks!"

Anna believed her car was faster, but she didn't want to be behind the wheel proving it. When she gave her keys to Tod, Bill said, "OK, let's do this. Tod, you follow me about a mile down the road to the start. Anna and Jesse, wait here at the intersection. The next time you see me, I'll be crossing the finish line after spanking Tod's butt!"

Can you guess what happened? If you guessed the race did not go as planned, you'd be right. However, it's important not to cut to the chase too quickly, so here's the rest of the story.

The four Soldiers met a month earlier through a local car club and became friends. On this particular Saturday evening, they decided to hang out, play video games and watch movies until Anna signed out on leave. She planned to hit the road for a 1,000-mile drive to her parents' home (leaving at midnight was a risky choice, but that's a topic for another article). As soon as she signed out, the four Soldiers drove to a secluded area to shoot off some fireworks. She drove her car, which had a 3.0-liter V-6 engine, while Bill drove his vehicle, which was equipped with a 2.4-liter four-cylinder engine.

After shooting off fireworks, Bill challenged Anna to a race, claiming he was a better driver and could win even though his car had the smaller engine. Bill had a history as a high-risk Soldier, having caused an accident a couple of years earlier. He had also

RIEND

collected several speeding tickets, including one that cost him his driver's license. Additionally, his unit identified him as its No. 1 high-risk Soldier—not only because of his driving, but also because of his conduct on and off duty. In fact, the unit intended to discharge him from the Army.

Anna had recently returned from Iraq and was, by all accounts, an outstanding Soldier. She was, in fact, in the process of submitting a packet to attend the West Point Prep School. However, she was afraid to race her car that night and, instead, allowed Tod to race for her. Tod was 17 years old and only had a learner's permit. His unit discovered he'd bought a car and, three days before the accident, his platoon leader ordered him not to drive. Tod's inexperience made him dangerous behind the wheel.

It's time to fast-forward to the race.

Bill and Tod dropped off Anna and another Soldier, Jesse, at an intersection that would serve as the end of the race. They then drove back up the road, did a U-turn and lined up beside each other.

When Bill blew his horn the third time, both drivers hammered their gas pedals. Anna's car was the faster of the two. Tod was doing nearly 125 mph when he lost control in a curve and began sliding sideways down the shoulder toward Anna and Jesse. Anna saw the car coming toward her, turned and ran away from the street. Jesse tried to run along the shoulder, but was struck by the car and hurled 50 feet into a ditch on the far side of the intersection.

The car didn't roll, but slid to a stop instead. At first, Tod, Anna and Bill didn't realize Jesse had been hit. After a few minutes, Bill realized Jesse was missing and searched until he found him. Tod called 911 and police and emergency services arrived on the scene within minutes. However, Jesse was declared dead at 1:36 a.m. by a justice of the peace. For the sake of bragging rights in a street race, one Soldier was dead and two others potentially faced prison time for felony drag racing. This was not part of their plans for that night. But on the street—where there are no controls to keep racers or spectators safe—anything can happen.

> “Leaders **NEED** to **ENGAGE** their Soldiers and Soldiers need to **TAKE CARE OF EACH OTHER** to **STOP** such tragic and **NEEDLESS LOSSES**.”

What can we learn from this tragedy? First, bravado or trash talk might be OK on the track, but when it leads to Soldiers street racing, it can be a setup for disaster. Many Soldiers own high-performance vehicles. In fact, Jesse had a reputation for doing burnouts, speeding and weaving through traffic in his vehicle. Leaders need to identify Soldiers with high-performance vehicles and encourage them to find a legal and safe outlet for their "need for speed." For example, the Sports Car Club of America sponsors races where Soldiers can test their skills without risking their lives. Beyond that, Leaders also need to find out about local car clubs. While many of these clubs provide a positive environment where Soldiers can show and legally race their cars, others are knee-deep in street racing. Local law enforcement can help leaders identify which clubs to avoid.

As stated earlier, Bill was a problem child and on his way out of the Army. Unfortunately, Soldiers like Bill can often influence younger, less-experienced Soldiers and lead them into dangerous situations. Leaders must take effective action to prevent that from happening.

Street racing is a dangerous activity that is on the rise nationwide. It's important to learn the hard lesson from Bill, Tod, Anna and Jesse's experience. Leaders need to engage their Soldiers and Soldiers need to take care of each other to stop such tragic and needless losses. «

SEAT BELTS SAVE LIVES
IF YOU WEAR TH

MICHAEL WOOD
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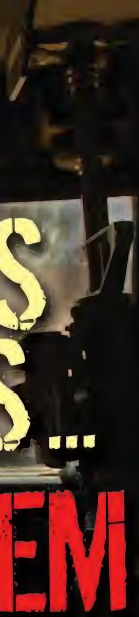
Since the beginning of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), the Army has lost many young men and women to enemy actions. When Soldiers engage the enemy, there is an expectation that lives will be lost. But to lose Soldiers in Army Motor Vehicle (AMV) accidents because they did not wear a seat belt or gunner's restraint system defies understanding and is unacceptable.



When reviewing OIF and OEF AMV accidents, there is a constant theme – fatalities and injuries as a result of occupants not wearing seat belts. Seat belts and gunner's restraint systems, when used properly, will reduce the loss of life and help reduce the severity of injuries.

Last year, the Army experienced 22 AMV accidents that resulted in the loss of 35 Soldiers. Rollover accidents accounted for 20 of those accidents and the loss of 33 Soldiers. A major percentage (80 percent) of these fatal rollover accidents occurred during OIF and OEF, where the culture is to not wear seat belts. Many Soldiers in theater believe wearing a seat belt or any form of restraint system will adversely affect their ability to egress a vehicle in a firefight or improvised explosive device (IED) encounter. Leaders must change this mind-set by enforcing Army standards and educating their Soldiers about the benefits of wearing a seat belt.

Seat belt use increases a Soldier's chances of surviving a rollover accident. In a rollover, unrestrained occupants can be ejected from the vehicle or thrown around inside. Soldiers ejected during a rollover can strike objects outside the vehicle, be pinned beneath the overturning vehicle or be struck by another vehicle; any of these incidents can cause serious bodily injury or death.

It doesn't matter what kind of vehicle incident you're involved in, whether it's an IED encounter, being struck by a local national vehicle or losing control of a vehicle and overturning. Without the use of restraint systems, occupants are at greater risk for injuries. The unbelted driver will be unable to maintain control of the vehicle, and unbelted occupants can lose situational awareness during the incident and be unable to make the correct life-saving decisions.

Wearing seat belts is not an option, it's an Army requirement. Seat belts save lives and help reduce the severity of injuries resulting from motor vehicle accidents. It's the responsibility of each Soldier and Leader to enforce this policy. Seat belts are the most valuable safety devices in vehicles today. Buckle up for safety; it's the right thing to do. «

» FYI

The Army Materiel Systems Analysis Activity (AMSAA) conducted an analysis of HMMWV accident fatalities from 2003 to the first quarter of 2006. The AMSAA's findings include:

- **HMMWV accidents in Iraq resulted in 88 fatalities. HMMWV rollover accidents accounted for 65 of these fatalities.**
- **Of the occupants who were wearing their seat belts during a rollover accident in a HMMWV, 94 percent survived.**

WHY SHOULD I WEAR A SEAT BELT?

- **Seat belts are designed to prevent occupants from striking the vehicle interior, equipment and other occupants.**
- **Seat belts are designed to prevent occupants from being ejected from the vehicle.**
- **Seat belts restrain occupants in their seats, enabling them to maintain situational awareness during an accident.**
- **Seat belt use is Army policy (Army Regulation 385-10, *Army Safety Program*, paragraph 11-4).**
- **According to the National Highway Traffic Safety Administration, in 2007, the seat belt use rate in the U.S. reached an all-time high. Seat belts save about 15,000 lives each year.**

SAVED B

REBECCA KNIGHTLY
Anniston Army Depot
Anniston, Ala.

If you think seat belts are optional—think again. On average, between 36,000 and 40,000 Americans die on the road each year. While it isn't possible to prevent every accident, more lives could be saved by wearing seat belts. A few years ago, I was in a horrible accident where paramedics said I would've been thrown through the car window and killed had I not been wearing my seat belt. And what is so ironic is that I'd been notorious for not buckling up. Thank God I did that day.

Y THE BELT

Y THE NARROWEST OF MARGINS

> “SURVIVING such a horrible ACCIDENT was a HARD WAY to LEARN the IMPORTANCE of USING SEAT BELTS.”

It was a Wednesday afternoon and my two older sisters came to pick me up after ball practice. The house was only about 10 minutes down the road, so my oldest sister decided to let my 16-year-old sister drive us home. It was her first time behind the wheel, so I began joking around, saying, “Hey, I think we should put our seat belts on. She doesn’t know how to drive!”

About two minutes into the trip home, the car went off the road. My sister was concentrating more on the gearshift than driving and we were beginning to drift toward the right shoulder. I grabbed her shoulders to get her attention and screamed, “Mailbox!” She overcorrected to the left, spun the car sideways on the rain-slicked road and went into oncoming traffic. There, a red pickup struck the front passenger-side door of our Toyota Corolla. As we went off the road and into a ditch, we slammed into a boulder. The boulder crashed through the right-rear passenger-side door where I was sitting. The impact wrapped my right leg behind my head and caused a compound fracture of my femur. In addition, I suffered a massive head injury and immediately went into a coma. When I woke up in the hospital nine days later, doctors told me I had almost died on the way to the hospital. They were certain that if I survived, I would be permanently brain damaged. During the following 11 months, I received physical therapy and progressed from using a wheelchair to walking on crutches and, later, to using a walker. Today, I am fully recovered and as good as new.

Both of my sisters also survived, thanks to their seat belts. My older sister, who had given birth two weeks before the accident, suffered a ruptured spleen and other internal injuries. My other sister suffered three broken ribs. We were all fortunate to be alive.

Looking back, I am grateful I buckled up that day—even if I just did it out of kidding my sister. My comments about her driving abilities proved more prophetic than I could’ve imagined. Surviving such a horrible accident was a hard way to learn the importance of using seat belts. Afterward, I understood why my parents always insisted we buckle up.

When it comes to accidents, most people think, “It’ll never happen to me.” However, the truth is, it can happen to you—so you’d better be prepared. If I hadn’t been wearing my seat belt that day, I would’ve wound up in a coffin instead of a coma. Before I turn on the ignition, I make sure everyone is buckled up. Before you hit the road, you should too! «

RISKY BUSINESS

Soldiers face numerous risks both on the battlefield and during training. We are taught to use composite risk management to mitigate these risks; so why are Soldiers still being seriously injured or killed in training and non-combat-related accidents on and off the battlefield? Is it a failure of leadership to engage? Is it an individual failure? Bottom line: You need to take care of yourself and your team members and not become a needless injury or fatality.

RONALD THORNHILL
U.S. Army Technical Center for Explosive Safety
McAlester, Okla.

Since October 2007, there have been at least three fatalities and numerous other serious injuries due to ammunition- and explosives-related accidents. These type accidents can happen to Soldiers while training stateside or deployed overseas in combat. In a recent accident on a post in the United States, a Soldier was killed when a live round became mixed with dummy ammunition being used in a "dry-fire" demonstration. Investigation into the accident revealed this was not an isolated case, and there were other events where live, blank and/or dummy ammunition had been mixed.

At a number of locations, similar examples of poor ammunition control have been discovered, including storage of munitions in non-licensed facilities, mixing non-compatible munitions, improper storage of non-standard munitions and explosives, lack of accountability for munitions and failure to identify and enforce authorized storage limits. Each of these examples indicates a serious breakdown in the ammunition and explosives safety program.

As Vice Chief of Staff, Army, Gen. Richard A. Cody stated in a message to all Army activities, "Unless leadership and individuals alike take immediate steps to review and assess their ammunition and explosives procedures, training programs, storage licenses and accountability standards, similar future events are apt to occur. Positive control of ammunition and explosives is mission essential."

In an incident at a forward operating base in Iraq, two Soldiers were cleaning the front yard of their living area when they dug up what was described as a 10-inch-long yellow pipe. The item had a thick covering of dirt, which one of the Soldiers attempted to remove by striking it against a wall, causing it to detonate. One of the Soldiers was killed and the other seriously injured. From debris at the scene, explosive ordnance disposal confirmed the item was a BLU-97A/B or BLU-97B/B submunition—an unexploded ordnance (UXO). This area had been attacked by U.S. forces earlier in the war and there were reports of numerous other submunition finds in the vicinity within the past several months.

When Soldiers encounter UXO, they should always follow the three Rs of explosive safety:

- Recognize the item is a munition.
- Retreat from the munition; do not touch or disturb it, but move carefully away, walking out the same path the area was entered.
- Report the munition and its location.

In another incident, during a unit ammunition turn-in in Iraq, a Soldier attempted to remove duct tape from around the fuze of a grenade-type munition. While removing the tape, the Soldier accidentally pulled the pin and the charge exploded, severing the Soldier's arm and causing severe shrapnel injuries to his leg and face. Two other Soldiers were also injured.

As with any type ammunition, grenades should always be handled with extreme caution. Soldiers should never attempt to remove tape from any grenade-type ammunition item. When handling grenades, remember the following:

- Do NOT tape the safety lever or safety pin.
- Do NOT bend, tamper, modify or otherwise alter the safety pins or safety levers.
- Grenade safety devices are designed as part of the grenade to keep you safe.

In yet another recent explosives-related incident, a Soldier was killed when a rocket propelled grenade he had collected from a weapons cache detonated in his backpack. At the time of the explosion, the Soldier was waiting with other Soldiers for a flight via a CH-47. Three of those Soldiers were also injured, one seriously. Soldiers must understand recovered enemy ammunition is not a souvenir or war trophy; it's dangerous and could cost them their lives.

Could all the tragedies above been prevented? Of course; it's just a matter of Leader engagement, proper training, recognizing hazards, assessing the risks and mitigating those risks. Above all, Soldiers must exercise situational awareness and self-preservation. Remember, if you did not drop it, do not pick it up! «

LEAVE IT ALONE!

- **Never pick up an object if you're not sure what it is.**
- **Ensure personnel are aware of area hazards and history.**
- **Recognize the hazards posed by seemingly innocent-appearing objects.**
- **Report suspect items.**

» DID YOU KNOW?

Statistically speaking, ammunition and explosives accidents increase in the springtime.

BIKING BOOZING BLEEDING

NAME WITHHELD BY REQUEST

It was June 28, 1997—the night of the Mike Tyson versus Evander Holyfield fight. Everyone remembers that as the night Tyson bit off Holyfield's ear. However, I remember it for a different reason. I was 21 years old, on top of the world and the proud new owner of a 1996 Honda CBR 600 F3. Man, was it fast, but I already desired a faster bike. Normally, I wore the proper personal protective equipment, including a helmet, gloves, a heavy leather jacket and leather boots. However, this night, I wore only my helmet, a long-sleeved shirt, boots and shorts.

I was attending a friend's party on base about two miles from my barracks. Naturally, there was a keg and, of course, I was drinking. I know—you can already see the recipe for disaster starting to take shape. I had a couple more drinks and headed out with a bunch of people who were leaving the party. One Soldier was doing the "right thing" by offering rides to anyone who needed a lift home. My motorcycle-riding buddy and I actually got in his truck and started to buckle up. (This is the moment I wish I could go back and recapture.)

At the last minute, I became concerned that the party host's kid might play with my bike and accidentally pull it over on himself. Because of that, I made the decision to ride my bike the short distance back to my barracks. No problem, right? My riding buddy supported my decision and decided to follow me home on his bike.

We both cranked up our bikes and hit the road. As soon as my bike topped 10,000 rpm, the adrenaline and alcohol in my bloodstream mixed and any semblance of good judgment went out the window. I was now a slave to my adrenaline addiction.

I raced off, leaving my buddy in the dust as he tried to keep up. I made an "oops" and accidentally flew past my turn. I turned around and accelerated to nearly 100 mph before slowing to about 70 mph and attempting to turn onto the road that led to my barracks. However, I was fresh out of luck and talent. I turned too early and went onto the grass. My bike quickly slipped out from under me, slamming my right shoulder onto the ground. I remember hearing the sound of plastic scraping and breaking.

Once I stopped sliding, I quickly stood up to make sure I was still in one piece. I located my bike and attempted to pick it up. However, I couldn't lift it because the handlebars were broken in half. When I looked behind me, I saw I'd slid nearly 200 feet! Then I saw something else that still horrifies me today. I saw the twisted remnants of a stop sign that my bike had sheared off at the bottom. Had I been on the bike when it slid through that stop sign, I would have been cut in half just above the pelvis. To this day, I don't know how I managed to avoid being more seriously injured. As it was, I'd burned a hole in the toe of each of my boots and had some gouges in my right shin. I was lucky that night because things could've ended up a lot uglier. Since then, I have made it my mission to tell other riders about this—the stupidest thing I have ever done. If it helps even one rider decide not to mix alcohol, adrenaline and speed—then it was worth it. «

HONE YOUR SPORTBIKE SKILLS

EARNEST EAKINS
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

The "Biking—Boozing—Bleeding" article is a perfect example of risk acceptance. The rider accepted the risk associated with drinking and riding, even though he was fully aware of the possible consequences. Later on, when he had the opportunity to reconsider the cost of his decision, he wished he'd chosen not to ride. Tragically, many riders don't survive their risky decisions to reconsider them later. Thankfully, that was not the case in the author's story.

The Army recognizes that many fatal motorcycle accidents are caused by riders choosing to accept risks beyond their skills or ability to handle. As a result, the U.S. Army Combat Readiness/Safety Center has partnered with the Motorcycle Safety Foundation (MSF) to help create a new course dedicated to sportbike riders. The *SportBike School*, due to be fielded during this year's 101 Critical Days of Summer Safety Campaign, will allow riders to more accurately assess risks while honing their skills to be safer on the road. As in previous MSF courses, the school includes both classroom and range segments. In the classroom, riders are given a risk perception quiz where they are asked if they think they are overly risky. Once riders answer that question, they take a risk acceptance inventory allowing them to compare their risk perceptions with those of others. Riders are then shown where they appear on a graph measuring perceived risk levels. Working from that graph, instructors show riders how increasing their skills—even while maintaining the same risk acceptance levels—can reduce accidents.

To reflect the handling characteristics of sportbikes, the school's range exercises are more difficult and done at higher speeds than previous MSF courses. During the range exercises, riders are placed in situations where they must stop or maneuver quickly. For example, during the stopping demonstration, riders get to see how even modest increases in speed can dramatically affect stopping distances. The goal is to give riders a "reality check" to help them avoid accidents and live to enjoy their sport.

For more information on the course, interested riders should contact their installation's Army Traffic Safety Training Program manager. «

THE INVISIBL
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CHIEF WARRANT OFFICER 3 MARCELO ASSUMPCAO
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

Every year, the Army loses Soldiers during the summer months to an invisible opponent—heat. Fortunately, these needless losses and other heat-related injuries can be prevented by the application of composite risk management (CRM).

The nature of our business requires Soldiers to constantly train and operate in severe weather conditions with extreme temperatures; however, heat injuries can occur even when temperatures aren't extreme. The cumulative effects of strenuous activity over a period of time can result in a Soldier becoming a heat casualty during low-risk conditions. Leaders must remain engaged in order to provide the best protection for our Soldiers, and the best protection is prevention.

There are several control measures that will aid in heat-injury prevention, including monitoring wet bulb temperatures, paying closer attention when temperatures rise or when mission-oriented protective

> “Leaders **MUST REMAIN ENGAGED** in order to provide the **BEST PROTECTION** for our Soldiers, and the best protection is **PREVENTION.**”

posture suits are worn, adjusting work and rest schedules and ensuring Soldiers are acclimated, conducting briefings on heat injury symptoms, taking into account earlier exposure to environmental heat and possible dehydration and using the buddy system.

Another control measure several units have implemented is the use of a Soldier tracking system, which is capable of providing real-time tracking of Soldiers. The Soldiers’ movements are monitored and displayed by a system that uses global positioning system (GPS) position reports provided by the Soldiers’ player unit radios and transmitted to a transportable relay radio. The position reports are then routed through computers to workstations that display the Soldiers’ positions on an aerial overlay of the land navigation area. The system is contained and does not rely on a Web-based interface.

In addition to prevention, it is critical Leaders and Soldiers are able to identify and initiate the appropriate treatment measures for the different types of heat injuries. The most severe heat-induced illnesses are heat exhaustion and heat stroke. If action is not taken to treat heat exhaustion, the illness could progress to heat stroke and possibly death. To help avoid heat-related injuries, Leaders and Soldiers should:

- Drink plenty of fluids. In hot environments, it’s possible for the body to lose one liter of fluids per hour. Thirst is not a good indicator of fluid loss. Don’t wait until you’re thirsty to drink fluids.
- Be aware of their environment. If you work in the heat or around heat sources, take whatever steps are possible to control the heat externally. It’s also recommended that ice sheets are readily available during high-risk activities to reduce the severity of a heat injury.
- Take frequent breaks. As the temperature increases, more frequent breaks are needed to stay cool.
- Wear proper clothing. Loose, lightweight fabrics encourage heat release.
- Acclimatize. It takes at least seven to 10 days to get used to working in a hot environment.
- Stay in shape. A healthy heart and good muscle tone work more efficiently and generate less heat.
- Eat light during the workday. Hot, heavy meals add heat to the body and divert blood flow to aid with digestion. Normal dietary intake typically replaces all salt lost during the day, so there is no need to take salt supplements.
- Be aware of special heat stress risks. Caffeine, alcohol, diabetes or medications for high blood pressure and allergies can increase the risk of heat stress.

CRM should be a continuous process applied across the full spectrum of Army training and operations. Through the engagement of our Leaders, we can help ensure Army Safe is Army Strong! «

PAY ATTENT TO DETAIL

PERRY HUMBLE
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

Two of my buddies and I took a week-long motorcycle trip last fall to the Great Smoky Mountains. We chose October so we could enjoy the changing leaves and escape the oppressive heat of summer. Although we were all in our 50s, we'd started riding back in our teens. A couple of us had taken Motorcycle Safety Foundation training and we'd all been riding regularly.

We planned our route predominantly on country roads to avoid the high speeds normally found on interstates. While planning the trip this way showed a high risk on my TRiPS report, I figured it would be safer than riding at higher speeds in congested interstate traffic. This reasoning was proven correct on the last day of the trip, but more on that later.

We had our bikes inspected and serviced. We developed a checklist, including tools, money, maps, travel routes, emergency phone numbers, first-aid kit, rain gear and leathers. Just like preparing for an aviation mission, we covered all the obvious risks and planned for the unexpected. Our plans included doing a T-CLOCS inspection—checking the tires, controls, lights, oil, chassis and stands—each day before beginning our ride. To increase our visibility to traffic, we put reflective vests over the bags on the backs of our bikes. I also put a reflective belt on my handlebar bag. We rode in a staggered-right formation unless conditions dictated otherwise. We agreed on hand signals and short phrases to use should there be an emergency or a need to stop. We planned plenty of fuel and rest breaks. In aviation, you learn early on to never miss an opportunity to take on fuel or drop off water. We briefed the trip on three different occasions and were satisfied we were ready to go on the appointed day and time. We also provided our Families with copies of our daily routes and destinations.

The weather was warm and muggy on the morning we left for our adventure. About 20 minutes after our first fuel stop, the lead rider hit a rattlesnake with his rear tire, sending it flying through the air (in my direction, of course). Everything went into slow motion. The serpent landed on the road in front of me. As it hit the ground, it coiled with its tail sticking up and its head in the strike position—that's how I knew it was a rattler. I was about to say "rattlesnake!" when I rolled past it. I was glad I got by before it got even.

The rest of that day was uneventful. The following day, we encountered rain during the afternoon. However, we were prepared, donning our rain gear and reducing our speed accordingly. The rest of the trip unfolded as planned, as we had the blessing of seeing some beautiful scenery during our ride.

However, we weren't home safe yet. As we headed out on the final day of our trip, we had two close calls with vehicle (cage) drivers on the interstate. The first was when a pickup driver either failed to notice we had right-of-way or refused to yield it during a merge and cut off the lead bike. The rider saw the pickup out of the corner of his eye, just as I called out to warn him. Fortunately, my friend avoided what could have been a catastrophic collision for both of us. That reinforced the fact that riding a motorcycle is like flying a helicopter—you must constantly have your head

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on a swivel, searching for the dangers around you.

We regrouped, stopped for lunch and discussed the near miss. Afterward, we got back onto the interstate. After riding a few miles, we hit heavy traffic. Most of the drivers were going well above the speed limit (no surprises here)—which is where we ran into our second problem. We were doing the speed limit; however, one particular driver apparently decided we were occupying the space he wanted and weren't moving fast enough to suit him. According to our trail rider, the car cut in so close behind me (I was the second rider in our group), it looked like he intended to hit both me and the lead rider. (Could this have been an example of road rage?) But, again, through hand signals, teamwork, God's help and paying attention to detail, we managed to escape an accident.

So what's the point in this story, you might ask? We paid attention to detail during the planning, execution and post-ride phases of our trip, identifying every possible risk we could imagine. Because we did that, we weren't caught by surprise and forced to improvise when things went wrong.

There's an old adage that says you should operate your vehicle as if everyone else on the road is out to get you. When you're on a motorcycle, that's not paranoia—that's preparation. Because other motorists are often distracted, we must make it our job to avoid their mistakes. We must constantly be on the alert, paying attention to details. For us riders, those details can be the margin between life and death. «

> “Our plans included doing a **T-CLOCS INSPECTION**—checking the **TIRES, CONTROLS, LIGHTS, OIL, CHASSIS** and **STANDS**—**EACH DAY BEFORE** beginning our **RIDE.**”

Pssst … safety pros. Want to know a tool I used to help reduce accidents 75, 25 and 55 percent in my last three safety offices? I'll give you a hint; you're seeing it with your own eyes right now. It's the media.

MEDIA AN SAFETY A GREAT MATC

CHARLES RYAN
19th Sustainment Command (Expeditionary)
Camp Henry, Korea

There are numerous outlets to spread our safety message – print, radio, television and the Internet.

I've been welcomed with open arms here in Korea by the various media outlets. It's a great working relationship as, overtly, I give them timely and sound safety products, but, covertly, I help them meet their monthly news material quotas. Helping each other out is the foundation of a good working relationship. Being located outside the continental United States (OCONUS) with American Forces Network (AFN) nearby is a plus. I see stateside media venues like post newspapers and TV productions such as "In Step with Fort Riley" as one example of a great resource to share safety information to your respective audience.

With television, I've created a "Safety Guy" persona, complete with a reflective outfit topped with an orange hard hat that is known to viewers of AFN-Korea. I average a 29-second Public Service Announcement (PSA) per quarter and try to deliver it with a little humor. I'm often told my best "Safety Guy" PSA is the one where I offer water to a Soldier running a race and he bats the cup out of my hand, splashing me in the face.

Through print, I've written columns in the Korea-wide periodical (*Morning Calm*) and the 2nd Infantry Division's newspaper. Soon, I'll post a "Safety Sez" column in my next unit's digital newsletter at the 19th Sustainment Command (Expeditionary). Whether I use print or the Internet, I know there are Soldiers that will read my column. I keep it short, timely for that month's common risk and written to the target audience – my junior Leaders and Soldiers. I'd "guesstimate" the 30 minutes it took to write a hydration safety column reduces the chance my unit will suffer a hydration injury by 30 percent. Sounds like a good time investment to me.

But it's probably my efforts with AFN-K radio that best delivers my safety tips. I've recorded more than 25 radio PSAs over the past few years – some funny ones with one- and

> "There are **NUMEROUS OUTLETS** to spread our safety message – **PRINT**, **RADIO**, **TELEVISION** and the **INTERNET**."

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ROLLOVERS: PREVENTIVE MEASURES FOR YOUR MISSION
KNOWLEDGE
OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY
GET IN YOUR LANE
DEVELOPING SAFE DRIVING HABITS
CHECK YOUR TREAD
DEEP IN IIMC
THE EYES HAVE IT
KNOW YOUR CREW
SPEAK UP AND ASK QUESTIONS

two-star commanders. During football season, I've hosted the "Football Guru Show," which features weekly and grand prizes for the listeners who predicted the most outcomes of NFL games correctly. Every game, I spoke about safety during the show, squeezing in a safety tip. For example, "The Patriots are on FIRE now, just like your kitchen could be if you leave cooking food unattended." Each summer, I also hold a "Safety Phrase that Pays" contest, where a PSA saturates the airwaves each week with a different safety phrase. When the DJ asks for a caller, the person that calls in with the phrase wins a gift coupon from AAFES. Safety, when linked with prizes, is downright palatable to Soldiers, civilians and dependents.

One by-product of media and safety was demonstrated by 8th U.S. Army Korea winning the Army Headquarters Safety Award in 2005 and 2007. Another is we are above the medium with the Army Readiness Assessment Program (ARAP) question of "Does the unit show an interest in safety?" Now, I can't actually prove my media blitz had anything to do with the reduction in our accident numbers; however, and most importantly, I can't prove it didn't! «

Overwater mission risk management is a complex and important planning consideration. Commanders should research options, assess risks and document the application of controls in unit standing operating procedures (SOPs). Just like all other programs, after implementation, you should periodically review the SOP and training programs and make necessary modifications.

RISK MANAGEMENT FOR OVERWAT

CHRIS TRUMBLE
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

Army aviation's global operational area often necessitates travel over large bodies of water. During the previous five years (fiscal 2002 to 2007), Army aviation has experienced nine Class A and one Class B accidents involving rotary-wing aircraft crashing into water. The Army issues overwater survival equipment to aviators whose missions may take them over wide expanses of open water. Overwater aviation life support equipment (ALSE) includes an inflatable life preserver unit, exposure suit, life raft (SRU-37/P) and the Survival Egress Air (SEA) Mark II.

In the U.S. Army Forces Command (FORSCOM) Supplement 1 to Army Regulation (AR) 95-1, *Flight Regulations*, all helicopter crewmembers conducting overwater operations beyond the gliding distance to land require training in the use of the SEA system and require the wearing of an approved flotation device. To prepare for a water survival situation, ensure you have appropriate training and the required survival equipment. This is best accomplished by knowing what survival equipment is available through the Army supply system and having suitable equipment available commensurate with your unit's operational environment and mission. The unit's ALSE officer, technician and flight surgeon can best advise leaders regarding the equipment needed to resource the unit mission.

Part of your unit training for sea survival should include how and when to use the survival radio. If your unit has multiple models of survival radios, each type of radio should be addressed in unit training. Additionally, threats from and effects of exposure and how to best mitigate these through the use of sunscreen, shelter and clothing should be included in the SOP and unit training. Consideration should be given to including psychological issues related to water survival, as well as a post-traumatic stress disorder management plan, in your unit's SOP.

In the event you have a raft survival situation, you should be aware of planning and psychological issues to decrease your risk level and increase the odds of survival. Psychological issues can include panic effects such as freezing, weeping or screaming irrationally for help. Training in open-water survival techniques and knowing what to expect can reduce the odds of panic. Also, knowledge of the operational characteristics and confidence in the quality of ALSE can ease Soldiers' minds during a stressful sea survival situation.

FYI

The U.S. Army Materiel Command project manager for Air Warrior manages the ALSE program for Army aviation and can be contacted at https://peosoldier.army.mil/multimedia.asp).

A feeling of hopelessness can be dangerous to the survival of downed aviators and their crews. This is true in any survival situation, but can be especially true during a water survival situation. Hopelessness can feed on itself and, once started, can rapidly become more difficult to overcome. It is important to maintain hope, as well as a good sense of humor.

Fuel, oil and other chemical contaminants are a real possibility if an aircraft impacts the water. Swallowing fuel, oil and saltwater often results in coughing and vomiting. Often, the eyes will be sore from saltwater and petroleum contamination. Over time, these injuries will usually clear up. Upon rescue of the affected crewmembers, cleaning the skin with mild soap and treating the eyes with Bacitracin ointment (NSN 6505-00-582-4190) will help. Warm milk with honey or sweet tea can help soothe an upset stomach if medical treatment is unavailable.

Life raft ailments can derive from saltwater exposure, lack of drinking water, exposure to the elements and motion sickness. Cracking skin occurs after the skin is exposed to saltwater spray. To mitigate this threat, cover your skin as much as possible and protect exposed skin with sunscreen. Prolonged exposure to saltwater spray can lead to saltwater boils. Do not squeeze or prick

TER MISSIONS

the boils or make any attempt to remove excess liquid in them. Boils should be covered with a dressing. Cracking and parching of the lips can occur when exposed to the sun, wind, cold and/or salt spray. The best way to prevent this is through the use of lip balm.

The lack of drinking water can result in a relatively minor, but annoying, ailment known as dry mouth. This can easily be remedied by rinsing the mouth with drinking water, chewing gum or sucking on buttons. A more serious problem associated with the lack of drinking water is urination problems. Urine can become dark and possibly thick due to lack of water. To stimulate passing urine, it sometimes helps to dangle your hand in the water. For consideration and planning purposes, Technical Bulletin MED 577 states for a temperate environment, 1.5 gallons per person per day should be planned. While this amount is probably impractical to carry in the ALSE vest, it does illustrate some of the planning challenges in developing an overwater survival SOP.

Motion sickness or, specifically, sea sickness can occur as a result of the continual movement of the liquids in the inner ear. This movement confuses the sensory balance, resulting in loss of balance and gastrointestinal disturbance. To counteract this effect, a strategy of drinking as much fresh water as possible and eating small amounts at regular intervals can help. The use of motion sickness tablets is usually of no value if not taken well in advance of entering the water.

Upon rescue of the downed aircrew members, a warm bath, dry clothing, protection from the sun, fresh drinking water and food will assist greatly in their recovery. If the crewmembers were adrift for many days and experienced shortages of food and/or water during this period, they will more than likely be weak and dazed. They have probably experienced some degree of environmental exposure. Treat them for hypothermia or heat stress/stroke as deemed appropriate. Offer them warm drinks, but warn them not to drink too quickly (sip rather than gulp), which may induce vomiting. Soup or bread can be offered sparingly. Any food offered should be easily digestible. It is not uncommon for the survivor to experience swelling of the legs. The swelling will subside after a few days on land. Obviously, anyone experiencing a survival situation should be evaluated and treated as deemed necessary by the unit's flight surgeon.

In FORSCOM Supplement 1 to AR 95-1, underwater egress training is also mandated for units that have an overwater mission as part of their contingency plans or humanitarian mission. Think about New Orleans and Hurricane Katrina. Before Hurricane Katrina, who would have thought flying into downtown New Orleans would have been an overwater mission? If your unit has the potential to be called to a flood-prone area to provide humanitarian assistance, overwater survival needs to be considered in your SOPs and training. For training in overwater survival, Lear Siegler Services, Inc., provides Helicopter Overwater Survival Training (HOST) at Fort Rucker. The initial course is two days and the recertification course is one day. Additional information on HOST can be obtained by contacting Karen Roberts at robertsk@lsirucker.com.

DID YOU KNOW?

- **Deep ocean currents generally do not affect boats or rafts on the surface, but are involved with the overall ocean movement.**
- **Surface currents are constant for the most part and vary only with the seasons. Surface currents are described by the set (direction it flows) and the drift (velocity it flows).**
- **Tidal currents are of concern, especially when approaching coastal waters. Tidal currents are a result of the rise and fall of the tide. Tidal current tables should be studied for the operational area. There are four maximum currents for each tidal day (24 hours and 50 minutes).**
- **Wind-driven currents are continuous strong winds that can affect the surface currents slightly. The direction of wind-driven currents generally is slightly to the right of the wind direction for the northern hemisphere and slightly to the left for the southern hemisphere.**

DUSTOFF!

OVERWATER PERSONNEL RECOVERY

CHIEF WARRANT OFFICER 4 STAN STACY and
CHIEF WARRANT OFFICER 2 BRIAN R. JOHNSON
3-2 General Support Aviation Battalion
Eighth U.S. Army

Off the west coast of Korea in an area labeled Air Combat Maneuvering Instrumentation Point-Alpha, a flight of two UH-60As from Charlie Company, 3-2 General Support Aviation Battalion (GSAB), conducts some of the most rigorous training in Army aviation. They are training for the overwater personnel recovery (OWPR) mission.

Charlie Company routinely conducts this mission in support of 4-2 Attack, part of the 2nd Combat Aviation Brigade, which frequently operates overwater along the Korean coastline. This synopsis briefly outlines some of the training requirements, procedures and control measures associated with the OWPR mission.

Because of the inherent risk in overwater operations, the mission is always conducted by two aircraft unless approved by the brigade commander. The aircraft must also have out-of-ground-effect hover power and single-engine flight capabilities. Each aircraft is configured as follows:

Aircraft Equipment

- Calibrated/operational radar altimeters
- Operational attitude indicators (2)
- Operational vertical speed indicators (2)
- Operational global positioning system (1)
- Voice-activated warning system

Additional Mission Equipment

- 30- or 50-foot caving ladder
- External hoist
- Heads-up display for each pilot/night vision goggles for all crewmembers
- Blankets/litters (2)
- Survival kit/life raft (1)
- Chemlights (12)
- Cargo straps (4)

One of the aircraft in the mission must be fully qualified. This aircraft serves as the first response to a downed crew in the water. The second aircraft can consist of an instructor pilot or standardization pilot training an unqualified pilot. A fully qualified crewmember must demonstrate knowledge of the following topics:

Individual Training

- Water survival training (dunker/Helicopter Emergency Egress Deployment System (HEEDS)) techniques
- Personal flotation device preflight/wear/and deployment
- Anti-exposure suit wear and capabilities (IAW AR 95-1, mandatory when water temp is below 60 F and at the discretion of the commander between 61 to 69 F)
- Survival kit operations
- Signaling device usage
- Life raft and caving ladder deployment
- Hoist operations
- Aircrew training program/standing operating procedures requirements
- Search and rescue planning and operations
- Personnel recovery (PR) mission organization and communications

On average, training takes three days and a total of 12 flight hours, which can be reduced based on proficiency. The first day of training is daytime only. The second and third days of training are done under day and NVG conditions. Each crewmember is equipped with a personal flotation device, an anti-exposure suit, five red chemlights and a HEEDS bottle.

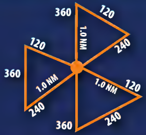
Weather planning minimums are a 1,200-foot ceiling and three miles visibility. There must be a visible horizon in at least two quadrants. Water temperatures, sea state and distance from shore play a significant factor in determining the risk level associated with a mission. They are categorized as follows:

Before conducting overwater training, crews conduct a "feet-wet" check. This consists of checking the auxiliary tanks for proper transfer, verifying and announcing "Bingo" fuel numbers and ensuring each crewmember has turned on their HEEDS bottle. The crew also restates the mission, checks the navigation system and radar altimeters and determines if they need to adjust aircraft altitude or airspeed.

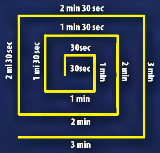
In the event of a downed aircraft, the crew receives an "echo report," which is formatted as follows:

Line	Information
Line 1	Downed aircraft location (usually in lat/long)
Line 2	Number and condition of survivors
Line 3	Method of marking pickup site
Line 4	Special equipment required
Line 5	Security of pickup site
Line 6	Wind speed and direction
Line 7	Sea state
Line 8	Hazards present
Line 8	Position/action of overwater aircraft

Once the echo report is called in, the reporting aircraft orbits at 1,000 feet to help the PR aircraft find the site. Once the PR birds arrive onsite, the other aircraft head to a safe landing area. If they are unable to find the downed crew, the PR aircraft will conduct one of two search patterns. The first one is a concentrated search pattern, which is a series of one nautical mile legs based off the reported location of the downed aircraft. The second is a rectangular box search method. With this pattern, the initial point is also the reported location of the downed aircraft. The search aircraft flies a leg and then turns 90 degrees. After each turn, the ensuing leg is longer than the previous.



Concentrated Search Pattern



Rectangular Search Pattern

Risk	Water Temperature	Sea State	Distance from Shore
Medium	>50 F	Green (0-3 feet, winds calm to 16 knots)	<20 miles
High	< 50 F	Yellow (4-8 feet, winds 17 to 21 knots)	>20 miles
Extreme High		Red (>8 feet, winds 22 to 64 knots)	

“WATER TEMPERATURES, SEA STATE and DISTANCE FROM SHORE play a SIGNIFICANT FACTOR in determining the RISK level ASSOCIATED with a mission.”

When the downed aviators are located during night operations, the PR aircraft will continue to make traffic patterns overhead. The crew will deploy chemlights on both sides of the aircraft to create references so they can begin hoist and caving ladder operations. This method is known as "deploying a runway."

If the downed aviator is injured but conscious, they should deploy four chemlights (if able) and lay back in the water with their arms out. If the downed aviator is not injured, they deploy four chemlights, wave a fifth chemlight over their head and remain calm while awaiting rescue.

The primary method of recovering the Soldier is the Jungle Penetrator. The Jungle Penetrator will touch the water to remove the static electricity. If the Soldier is unconscious, the medic will come down and connect him to the Jungle Penetrator. If the Soldier is conscious, the Jungle Penetrator will be deployed with the legs extended. The downed crewmember sits on the legs, detaches the straps, places them around his body and resecures them to the Jungle Penetrator. After the Soldier gives the flight medic a hand signal, he is hoisted out of the water. The hoist has a 600-pound weight limitation and, according to local standing operating procedure, a 20-knot wind limitation (with a 15-knot gust spread). The normal hover height during OWPR is 100 feet and the maximum bank angle is 30 degrees. While a crewmember is on the hoist, the maximum wind limitation is 20 knots and the maximum rate of descent is 1,000 feet per minute.

The alternate method of recovery is the caving ladder. Just like the Jungle Penetrator, the caving ladder must contact the water to remove static electricity. When using a 50-foot caving ladder, the aircraft hovers at 30 feet to ensure the ladder remains in the water. The downed aviator will take the D-ring from their vest and attach it to a rung on the ladder. The crew will pull the downed aviator into the aircraft or retrieve them when they are over dry land. The ladder's wind limitations vary with the ability to keep the ladder in the water. The maximum airspeed with a crewmember attached is 40 knots. Without a crewmember attached, the maximum speed is equivalent to a brisk walk.

Any crewmembers recovered during overwater operations, regardless their apparent condition, will be flown directly to 121st Combat Support Hospital in Seoul for medical evaluation and definitive healthcare.

The OWPR mission provides many unique challenges. Through careful training, planning and execution of OWPR operations, C Co., 3-2 GSAB, helps mitigate the operational risk of conducting maritime counter-special operations forces. Their efforts afford AH-64 crews from 4-2 ATK greater flexibility as they execute their mission and help provide peace of mind should the unthinkable happen. In today's Army, C Co., 3-2 GSAB is the only aviation company that conducts OWPR along with its mission of providing responsive, 24-hour MEDEVAC coverage on a daily basis. Their professionalism, dedication and competence help maintain stability on the Korean peninsula and contribute to a proud "DUSTOFF" legacy. «

"Yep, this is another one of those Rucker IP stories."

There I was, a standardization pilot instructing the Instructor Pilot (IP) Course. My student was a combat-seasoned pilot, a chief warrant officer 2 with about 1,500 hours. He had returned from Iraq a couple of months before and, by all accounts, was doing well.

It Could've B

CHIEF WARRANT OFFICER 4 GARY SCHAEFER
A Company, 6th Battalion, 52nd Aviation Regiment
APO AP 96202

We were flying the traffic patterns at Hunt Stagefield and all his maneuvers had been acceptable, with a nice control touch to boot. Nice, I thought, this sure beats flying Flight School XXI students. I finally get to relax and not go home with a knot in my back from the constant IP-ready position.

We finished a low-level autorotation to the ground and I went through a review of the maneuver and provided a critique of how he could improve. With the throttle at idle from the previous autorotation, I told him, "Let's try it again." Now this was simple for me; increase throttle to 100 percent,

> "When the **TRANSIENTS** were finished, we had registered **120 PERCENT MAST TORQUE** for **TWO SECONDS** and **116 PERCENT ENGINE TORQUE** for **THREE SECONDS**."

een Worse

finish your before-takeoff checks and call for takeoff. This is what I thought, but not what I said. After all, hadn't we just done the same thing about 15 times in the last hour and a half?

As I looked over to the next lane to regain situational awareness of the other aircraft, I felt the aircraft "twist" and noticed the engine noise increasing rapidly. I quickly looked back in the cockpit and noticed the engine torque, mast torque and rotor increasing quickly. I grabbed the throttle and quickly reduced it to idle as the engine torque and mast torque transitioned through 100 percent. Even though the throttle was at idle, the torques continued to increase. Cockpit warnings were going off and we were just along for the ride. When the transients were finished, we had registered 120 percent mast torque for two seconds and 116 percent engine torque for three seconds.

What had just happened?

The experienced IP trainee had a momentary lapse of judgment and thought we were at 100 percent. Instead of smoothly increasing throttle, he gave it a good "rap" to make sure it was fully open. Since the aircraft wasn't at 100 percent, his "rap" had taken the aircraft from idle to full open in less than a second.

Cost? A Huey ride back, one visual inspection and one lucky crew with only a Class E logged. My experienced IP trainee had a momentary lapse of situational awareness and I had failed to maintain my ready position and situational awareness inside the aircraft. Result? You guessed it … IP late with corrective action. It could've been worse! «

AVIATION

MH-47

CLASS C G Model

- The aircraft experienced separation of the ramp extension panel (tongue) while in the closed position during cruise flight.

OH-58

CLASS C D(R) Model

- The crew experienced an engine power turbine speed (NP) reading of 125 percent for six seconds during a full authority digital electronic control (FADEC) manual throttle approach maneuver.

UH-60

CLASS C A Model

- The flight crew experienced whiteout conditions during a visual meteorological conditions (VMC) approach. Aircraft inspection revealed damage to all main rotor blades consistent with ALQ-144 contact.

DID YOU CONDUCT A LANDING ZONE (LZ) RECON? IF POSSIBLE, ALWAYS DO A LOW RECON PRIOR TO LANDING AND PLAN FOR AN ALTERNATE LZ.

- The aircraft made ground contact during a standardization training autorotation maneuver. Postflight inspection revealed stabilator damage.

CLASS E

- While conducting sling-load training, the external load was released from the cargo hook in flight. The crew was executing a VMC approach and, as it began its descent below 300 feet above ground level, the hook armed switch was moved from safe to armed, releasing the load without further action from the crew. The cycle normal release button failed to the open position. The aircraft landed and shut down without further incident. The wiring to the normal release button was repaired and the aircraft was returned to service.

CLASS C L Model

■ The aircraft experienced failure of the tail-wheel strut during takeoff, resulting in damage to the tail boom.

CLASS D

■ While initiating a VMC approach to an improved landing area, the pilot on the controls performed a 10- to 15-degree decelerative attitude. The nose door opened, contacting and cracking the center windshield panel. The pilot on the controls placed the aircraft out of trim to accomplish a VMC approach to the landing pad without further incident. Suspected materiel failure of the left-side door latch resulted in the door opening in flight.

MH-60

CLASS E K Model

■ The crew heard a high-pitch whine from the No. 2 engine during the conduct of a fast rope approach. With engine indications normal, the crew returned to base and terminated the mission. During postflight inspection, the crew found indication of a foreign body (bird) that had been ingested into the No. 2 engine.

CLASS C L Model

■ The aircraft's forward-looking infrared (FLIR) system sustained damage during dust landing training. Upon touchdown, the aircraft settled into the dust and the FLIR contacted a submerged stone.

UAS

RQ-7B

CLASS B

■ The UAS experienced an uncommanded descent upon handoff to the LR/S controller. The recovery chute was deployed and emergency recovery procedures were implemented. The system was recovered from the crash location.

■ The UAS lost power following a series of landing attempts and crash-landed off the forward operating base. The system was recovered.

■ The UAS experienced a propulsion failure during descent for landing following altitude testing. The recovery chute did not fully deploy and the system crashed into an open field.

CLASS C

■ The UAS missed the arresting gear upon touchdown and veered off the runway, becoming partially submerged in an adjacent ditch.

■ The UAS experienced slack and subsequent binding of the launcher cable during engine runup and the launch carriage stopped short during the launch sequence, disrupting the launch and unseating the system.

GROUND

ACV

CLASS A

■ A Soldier suffered a permanent total disability and three other Soldiers were injured when their M992A2 Field Artillery Ammunition Support Vehicle

ARMY AIRCRAFT LOSSES

Fiscal 2002 to Present

through April 8, 2008

Hostile/
Non-hostile

AH-64A/D	11/51
U/MH-60A/L	8/28
C/MH-47	7/16
OH-58D	11/28
TOTAL	37/123

ARMY GROUND LOSSES

Fiscal 2008

through April 9, 2008

Class A/Fatalities

AMV	11/9
ACV	3/0
PERSONNEL INJURY includes weapons handling accidents	21/18
FIRE/ EXPLOSION	3/3
PROPERTY DAMAGE	1/0
TOTAL	39/30

(FAASV) overturned. The FAASV was hauling an inoperable FAASV when the tow bar failed and the hauled vehicle struck the lead vehicle, causing it to overturn.

DO SOLDIERS PUT THE VEHICLE'S TRANSMISSION IN THE RIGHT GEAR BEFORE DESCENDING A HILL?

AMV

CLASS A

- A Soldier died when the non-tactical vehicle (NTV) he was riding in collided with a tractor-trailer. The Soldier driving the NTV was attempting to avoid another vehicle that had entered his lane, causing him to cross the center line. Both Soldiers were wearing seat belts.

Personnel Injury

CLASS A

- A Soldier was killed in a pedestrian accident. The Soldier was leaving a medical facility when he was struck by a vehicle on the highway about a mile away when he ran into traffic.

- A Soldier was killed when he was struck by two rounds from another Soldier's weapon while conducting a day combat mission.

- A Soldier suffered a permanent total disability when he dived into a body of water and struck an obstacle.

- A Soldier was killed when he was pinned between two LMTVs during equipment clean-up at the wash rack following a major field exercise. The Soldier was between two parked LMTVs when the brake of the forward LMTV disengaged, causing it to roll back and pin him. Chalk blocks were not used.

RECENT DEADLY HAZARDS AT THE WASH RACK INCLUDE ELECTROCUTION AND SOLDIERS GETTING PINNED BETWEEN VEHICLES. WHAT SORT OF CONTROLS DOES YOUR UNIT HAVE FOR OPERATIONS AT THE WASH RACK?

- A Solider severed his right index finger at the second knuckle when it was caught in the track of the turret on an M1151 HMMWV.

- A Soldier suffered a permanent partial disability injury when his wedding ring caught while descending a 12-foot obstacle wall.

- A Soldier lost her finger when it was caught while attempting to connect rebar on a barrier to a crane hook.

DRIVING

POV

CLASS A

- A Soldier was hit head-on by a civilian driver evading police. The Soldier was evacuated to a local medical center, where she died from her injuries.

- A Soldier was home on leave when he was killed in a head-on collision with a vehicle that crossed into his lane. The Soldier was pronounced dead at the scene.

- A Soldier attempted to drive through a railroad crossing after the warning signals had gone off and the gates were down. A train hit the passenger-side of the vehicle, killing the Soldier and his girlfriend.

- A Soldier was riding with his girlfriend when she lost control of her vehicle, exited a wet roadway, struck a tree, sideswiped a pole and overturned. The driver, who was unbelted and ejected during the accident, was taken to a local hospital and listed in stable condition. The Soldier was pronounced dead at the scene.

POV DRIVING LOSSES

Fiscal 2008

through April 9, 2008

	Class A accidents/Soldiers killed
CARS	28/28
SUV/JEEPS	5/6
TRUCKS	6/5
MOTORCYCLES	21/20
OTHER*	2/2

*Includes: vans and ATVs

61 TOTAL DEATHS

Fiscal 2007: 54 3 Year average: 58

WEAR YOUR SEAT BELT

■ A Soldier was driving his pickup when he left the roadway, overcorrected, lost control, overturned and was partially ejected. The Soldier, who was not wearing his seat belt, was pronounced dead at a local medical facility.

■ A Soldier driving a vehicle with another Soldier riding as a passenger lost control at high speed and struck an underpass. The driver was pronounced dead at the scene, while his passenger was hospitalized with serious injuries.

DO YOUR SOLDIERS UNDERSTAND THAT SPEEDING REDUCES THEIR REACTION TIME WHILE INCREASING THE LIKELIHOOD OF A CRASH?

■ A Soldier was driving at high speed when he crossed a median and collided with a vehicle driven by a civilian. The Soldier was pronounced dead at the scene, while the civilian was hospitalized in stable condition.

■ A Soldier died in a vehicle crash after he lost control at high speed, left the roadway and struck a tree.

■ A Soldier stopped at an intersection and then pulled out without yielding right-of-way to through traffic. A vehicle struck the driver-side door of the Soldier's car. The Soldier was taken to a local medical center, where he was pronounced dead.

■ A Soldier was driving his pickup when he left the roadway, overcorrected, lost control, overturned and was partially ejected. The Soldier, who was not wearing his seat belt, was pronounced dead at a local medical facility.

POM

CLASS A

■ A Soldier was operating his sportbike along with several other riders when he lost control, left the roadway, hit a culvert and struck a fence post. He was air-evacuated to a local medical center, where he was pronounced dead. The Soldier had completed Motorcycle Safety Foundation (MSF) training the previous month and was wearing the required personal protective equipment (PPE).

■ A Soldier was killed while operating a sportbike at excessive speed when he failed to negotiate a left-hand turn and crashed. The Soldier had attended MSF training and was wearing all the required PPE.

LEADERS, DO YOU IDENTIFY HIGH-RISK SOLDIERS AND COUNSEL THEM BEFORE THEY ARE INVOLVED IN A CRASH?

RIDE FAST DIE FAST

PRELIMINARY LOSS REPORT
(POM CRASH KILLS ONE SOLDIER)

A Soldier was killed when he crashed his newly purchased motorcycle while operating it above the posted speed limit. The Soldier had entered a curve when he lost control, struck a guardrail and was ejected. He was pronounced dead at the scene. The Soldier had a driver's license, but only had a motorcycle learner's permit endorsement. He had taken an Army-approved Motorcycle Safety Foundation course. The Soldier did not have on all the required personal protective equipment, but was wearing a fastened full-face helmet, which came off during the crash.

Engaged Leaders Make a Difference

- Do Army Leaders know what their Soldiers are buying?
- What kind of checks and balances are in place to protect them?
- How do Soldiers prevent someone from becoming a fallen comrade?
- What tools can I as a Leader give them to help?
- How do I as a Leader get through to a Soldier?

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